

superior to the alternative: CLEC cost models that rely on geocoding abstract routing algorithms without taking into account the multitude of factors that determine where outside plant components such as cables, SAIs, and digital loop carrier (“DLC”) systems can be placed in the real world and at what cost. *See* AT&T Comments at 57-58. One important example involves the locations of SAIs and DLCs. As noted above, experienced network engineers in the real world recognize that such locations should be easily accessible to technicians—i.e., where parking is available and traffic does not create an undue hazard. Yet the most prominent CLEC cost model, HAI, assumes that these components could be simply moved around at will to reduce network costs. That assumption, and those like it, necessarily produce unrealistic results with no meaningful application in the real world.

Finally, the CLECs identify no reason for concluding that even the most conscientious regulators are better positioned than ILECs to make fact-intensive determinations about forward-looking routing and other network characteristics. *See, e.g.,* AT&T Comments at 9, 59. As noted above, ILEC decisions about the placement of cables and other network components must take into account a multitude of real-world factors. Even regulators’ best guesses about efficient network design are no substitute for the choices made by actual companies at a time when both price caps and intensifying intermodal competition give those companies profound incentives to act efficiently. For that reason alone, the Commission should minimize states’ discretion to adopt hypothetical routing and placement inputs.

## **2. Fill Factors**

The only reliable way to account for forward-looking spare capacity costs is to use ILECs’ existing fills. Fills in real networks reflect the application of the ILECs’ engineering guidelines, which are designed to serve demand as efficiently as possible while (i) satisfying the service quality standards expected of ILECs as carriers of last resort, and (ii) accounting for the

various constraints that affect utilization of network components in a real network. *See* SBC Comments at 64-67.

**a) Issues Relating to Demand Fluctuation**

The CLECs first argue that existing ILEC engineering practices (and resulting ILEC fills) are inefficient. *See, e.g.,* AT&T Comments at 67; Comments of Covad, at 10-11 (Dec. 16, 2003) (“Covad Comments”). That claim is pure myth. As noted, the ILECs’ engineering guidelines are specifically designed to produce the most efficient network design and fill levels given existing constraints, as even AT&T seems to concede.<sup>59</sup> Those guidelines recognize that, in many cases, the costs of installing additional spare capacity when facilities are constructed is negligible, and the long-term benefits in the form of lower operating expenses and improved service quality are significant. All existing users of ILEC networks, whether they are retail customers or CLECs that purchase UNEs, benefit from the application of efficient engineering practices that take this consideration into account. At the same time, price caps and competition provide substantial incentives for incumbents to reduce spare to the extent it is efficient to do so, because spare capacity by definition does not generate revenue.<sup>60</sup> *See* SBC Comments at 64-65. And there is no basis for the CLECs’ suggestion that the network today has a glut of spare from *past* inefficient engineering: ILECs have been subject to price cap regulation for years, and any

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<sup>59</sup> AT&T’s own engineering witness asserts that ILEC engineering guidelines “emphasize[] the critical importance of maximizing [the use of] existing capacity” and reducing spare capacity. Riolo (AT&T) Decl. ¶¶ 13, 33. AT&T’s oversimplification of ILEC engineering guidelines ignores the trade-off between the initial capital costs associated with constructing network facilities and the ongoing costs of operating and maintaining a network over time.

<sup>60</sup> ILECs’ current deployment of fiber is not reducing copper fills in the existing network to inefficient levels, as AT&T claims. *See* Riolo (AT&T) Decl. ¶¶ 47-49. SBC’s fiber deployments have had a negligible impact on copper fills, because the primary trigger for SBC’s deployment of new fiber has been the need for new capacity due to the exhaust of existing copper facilities.

excess levels of spare capacity that might have existed in portions of the network long ago would have long since been filled with use.<sup>61</sup>

The CLECs separately assert that spare capacity that will be filled with future growth should not be included in forward-looking cost studies. That assertion is flawed on several levels. As an initial matter, it provides no basis for substantially reducing the amount of spare capacity to be included in the cost studies. Notwithstanding the CLECs' intimations to the contrary, ILECs do not reserve tremendous amounts of spare capacity for "future" growth, defined as growth beyond the planning period in which CLECs will be using the UNEs at issue. Fills in real, functioning networks are influenced far less by the need to accommodate future demand growth than by the factors discussed in SBC's opening comments, such as breakage, uncertainty of demand over the short to intermediate term, and the need to satisfy carrier-of-last-resort obligations. *See* SBC Comments at 63-69.

Second, contrary to the arguments of some CLECs,<sup>62</sup> the fact that ILECs install some spare capacity in anticipation of future demand growth provides no basis for denying ILECs the ability to recover from current ratepayers the costs of that spare capacity. It is undisputed that the incremental costs of installing capacity in anticipation of demand typically is much lower than the costs of installing the capacity after the demand materializes. The CLECs' argument

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<sup>61</sup> For example, while it is true that, years ago, SBC installed spare capacity in some large metropolitan areas in anticipation of Centrex demand growth that did not materialize, *see* AT&T Comments at 67-68, the incremental cost of installing that spare capacity was very small, and that spare capacity has long since allowed SBC to serve many new developments more cheaply than it otherwise could have.

<sup>62</sup> *See generally* AT&T Comments at 9, 64-66 (arguing that current ratepayers should not have to subsidize future ratepayers by paying the costs of spare capacity installed in anticipation of future demand); Murray (AT&T) Decl. at 6.12-.14 (arguing that the cost of spare capacity should be discounted to reflect the present value of future demand).

would thus deny ILECs the recovery of efficient spare capacity costs on the premise that current ratepayers do not benefit from the existence of capacity that is currently spare in ILEC networks. But today's ratepayers *do* benefit from the engineering guidelines and efficiency considerations that produce the spare in the network today. Those same guidelines and considerations caused spare capacity to be installed in the *past*, allowing the incumbent to serve today's customers efficiently and quickly. The inclusion of this spare is thus an appropriate, efficient network design attribute, and incumbents should be compensated for the associated costs. The CLECs' contrary argument is simply an outgrowth of their incoherent TELRIC model, which hypothesizes a network that was built from scratch today and thus has no history of ongoing practices that could benefit current users.<sup>63</sup>

There is likewise no merit to the CLECs' related claim that, in the alternative universe posited by the current version of TELRIC, an ILEC that charged current customers for the cost of spare capacity that will be filled up by future demand would be vulnerable to entry by a competitor that did not charge current customers for the cost of similar spare capacity. *See* Willig (AT&T) Decl. ¶ 88. Any new entrant would have to charge its current customers for the full costs of the network it constructed, which would *have* to include spare capacity to allow it to grow over time. While it is true that an entrant that failed to recover its own operating and

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<sup>63</sup> To compensate ILECs for the costs of carrying efficiently installed spare capacity in a manner that is consistent with the CLECs' view of spare capacity, ILECs would have to be permitted to recover from current users the past costs of carrying today's capacity as spare when it was installed before current demand materialized. But no one advocates that approach. The far more sensible approach is to allow ILECs to recover from current users the costs of current levels of spare capacity.

capital costs could undercut the incumbent's prices, that entrant's imminent failure would be inevitable, and thus the threat—and pricing constraint—it presented would be minimal.<sup>64</sup>

Finally, the fact that, in some areas, ILECs have begun to experience decreases in total lines served should have no impact on the recovery of the costs of spare capacity. Demand in many neighborhoods continues to grow, and ILECs must have sufficient available spare capacity in order to serve customers in those areas efficiently. And even in areas where demand has declined, it could begin to rise again. Likewise, there is no basis for AT&T's speculation that declining demand for second lines should reduce any short-term demand fluctuations experienced by ILECs. SBC's experience has been that the demand for second lines has not become any more predictable—and certainly has not decreased enough to reduce the need for spare capacity—even as total demand has begun to decrease.<sup>65</sup>

**b) Customer Churn, Defective Pairs, and Carrier-of-Last Resort Obligations**

In real networks, customer churn reduces utilization and should thus be reflected in UNE cost studies. There is no merit to the CLECs' attempt to avoid the significance of such churn by pointing to the phenomenon of "soft dial tone," where an ILEC leaves a line connected to a given premises during the interval between occupants for the limited purpose of permitting outgoing

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<sup>64</sup> The CLECs' argument on this point also wrongly presumes that telecommunications networks are static and that today's spare capacity will be "filled up" by future demand without any need to install additional spare. Telecommunications networks are dynamic—as new demand materializes in a telecommunications network, new capacity is constantly being installed to relieve facilities that are nearing full utilization. As a result, fill levels across a mature, functioning network remain relatively constant over time.

<sup>65</sup> There also is no reason to believe that competition might "result in increased utilization," as AT&T speculates. Riolo (AT&T) Decl. ¶ 71. The experience of the two deregulated industries mentioned by AT&T (airline and trucking) is completely inapplicable to incumbent local exchange carriers, who remain very heavily regulated and subject to carrier-of-last-resort obligations even as competition continues to develop.

calls to 911 or to order service. *See, e.g.*, AT&T Comments at 62. The facilities connected to such temporarily vacant customer locations do not generate revenue; they remain in place only to reduce the cost of provisioning orders for new service when they become occupied again. There is thus no rational basis for treating them as “working” for cost study purposes.

The need to accommodate defective pairs also reduces fills in real-world networks. AT&T incorrectly argues that newer cables have lower defective rates, in part due to “advances” in splicing techniques, materials, terminal equipment, and serving area design. Riolo (AT&T) Decl. ¶ 27. But these so-called “advances” were implemented in ILEC networks many years ago, and efficient carriers must still plan for the reality that cable pairs may become temporarily or permanently unusable for any number of reasons.<sup>66</sup>

Finally, there is no basis for AT&T’s further suggestion that, in setting fill factors in UNE cost studies, regulators should disregard ILECs’ carrier-of-last-resort obligations on the theory that ILECs are compensated for those obligations through universal service funds. *See* Riolo (AT&T) Decl. ¶ 67. This argument is simply perverse. ILECs also cover some of their costs from retail rates, but even the CLECs would not suggest that UNE loop rates should be reduced to account for that. Yet in the rare case where a state universal service fund even exists

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<sup>66</sup> The most significant cause of defective pairs in the network is a phenomenon known as “hands in the plant,” which refers to the correlation between the number of defective pairs and the frequency with which technicians must rearrange or reassign cables in the network. Real-world networks with insufficient levels of spare capacity require technicians to perform costly rearrangements and reassignments more frequently than would otherwise be necessary. This in turn produces a greater percentage of defective cable pairs, which further reduces available spare capacity and increases the need for rearrangements and reassignments. Recognizing this relationship, ILEC engineers design networks with sufficient spare capacity to reduce the need for rearrangements and reassignments.

and an incumbent actually receives significant universal service support from it,<sup>67</sup> the purpose of those funds is to supplement precisely those *retail* rates so that the costs of providing those retail services are covered. And, just as an ILEC receives no retail revenue from a line it provides as a UNE, it typically receives no universal service support in connection with that line.<sup>68</sup> Instead, the *UNE* rates must cover the costs of that line, and those costs include a share of spare capacity on the network.

**c) Specific Fill Factors**

***Distribution Cable.*** It is indisputably more efficient to install distribution capacity that is sufficient to meet the constantly shifting demand for additional lines wherever that demand materializes, rather than incurring the added expense and delays associated with repeatedly dispatching technicians to reinforce or rearrange cables in provisioning orders. AT&T incorrectly asserts that this practice of sizing distribution cables to “ultimate demand” is too speculative for costing purposes. *See Riolo (AT&T) Decl.* ¶ 32. That is incorrect. The ultimate demand concept recognizes that it would be impossible to predict exactly where and when demand for additional lines will materialize and how it will shift throughout the life of the plant. Thus, the most efficient way to serve this inherently unpredictable demand is to size distribution cable so that it can be expected to accommodate the potential demand that might exist at any

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<sup>67</sup> In fact, many states do not even have universal service funds, and what funds there are do not remotely compensate ILECs for the full costs of satisfying carrier-of-last-resort obligations. Instead, most states still rely primarily on implicit cross-subsidy mechanisms such as geographic retail rate averaging, even though such mechanisms cannot long survive the cherry-picking facilitated by UNE-based competition.

<sup>68</sup> *See Report and Order, Federal-State Joint Board on Universal Service*, 12 FCC Rcd 8776, 8865-67 ¶¶ 158-63 (1997), *aff'd in part, rev'd in part on other grounds, Texas Office of Pub. Util. Counsel v. FCC*, 183 F.3d 393 (5th Cir. 1999).

point in the network at any point in time, not necessarily the total demand that is expected to arise in a particular portion of the network at the *end* of the useful life of the cables.<sup>69</sup>

**Copper Feeder Cable.** Copper feeder fills are affected by a variety of factors, including breakage, customer churn, and the need to accommodate predicted demand growth efficiently. AT&T's argument that stagnant POTS line growth has eliminated the need to install substantial amounts of spare copper feeder capacity is wrong for at least two reasons. *See Riolo (AT&T) Decl.* ¶¶ 62-63. First, although line growth may be stagnant overall, demand in many areas continues to grow, requiring spare feeder capacity to accommodate that growth. Second, other factors, such as breakage and customer churn, have a significant effect on copper feeder utilization.

AT&T also incorrectly asserts that ILEC engineering guidelines allow copper feeder plant to approach 100% utilization before requiring feeder relief. *See Riolo (AT&T) Decl.* ¶ 63. Though SBC's engineering guidelines allow for higher fills along portions of feeder routes that are closer to the central office (where copper feeder cable typically can be reinforced more quickly and at a lower cost than farther out in the wire center), those guidelines do not allow plant to approach 100% utilization before relief is actually installed. Doing so would compromise service quality and increase operating and maintenance costs far more than the

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<sup>69</sup> This concept is similar to the practices of many other industries. For example, grocery stores keep inventories of many different products on their shelves at all times, even though the customers that come in on any given day or in any given week will not purchase all of those products. Though grocery stores often cannot sell every unit on their shelves, they maintain their selection because they otherwise would have to turn away customers regularly when items are not in stock. Indeed, grocery stores take this approach even though they are not subject to the service quality standards typically imposed on ILECs as carriers of last resort. Those service quality standards effectively require ILECs to maintain networks that allow them to serve the potential demand that might exist at any given point in time without having to reinforce or rearrange cables constantly.



relatively small short-term savings that might result from delaying the reinforcement of feeder plant.

**Fiber Cable.** AT&T repeats the familiar myth that fiber strands in an efficient network essentially could be 100% utilized because of the use of “protect” fibers in fiber electronics systems and the ability to increase transmission capacity by simply adding more electronics. *See* Riolo (AT&T) Decl. ¶¶ 64-65. Contrary to AT&T’s contention, it would be virtually impossible to operate a fiber system in the real world with 100% fiber strand utilization. Indeed, the impact of breakage alone guarantees that fiber strand utilization will never remotely approach such levels, as a moment’s reflection confirms. For example, a typical DLC remote terminal requires four fiber-optic cable strands, but fiber cables are not available in a four-strand size. Thus, a carrier would have to use the next largest fiber cable size (typically a 12-strand cable) to serve a single remote terminal.<sup>70</sup> In addition, the cost of installing additional spare fiber in advance is far lower than the costs that a carrier would have to incur over time if fiber utilization levels were significantly higher than they are in ILEC networks today.<sup>71</sup> Thus, AT&T’s position that fiber fill factors in UNE cost studies should be set at 100% is preposterous.

**Fiber Electronics.** Factors such as customer churn and labor costs make it uneconomic to limit spare capacity of DLC plug-in cards to six months of growth, as AT&T advocates. *See*

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<sup>70</sup> Many fiber cables are manufactured with fibers grouped in ribbons of 12 strands. These ribbons simplify the splicing process and thus reduce installation costs. If the fiber electronics at a particular location require fewer than 12 fiber strands (such as a single fiber-fed remote terminal that requires four fiber strands), the 12-ribbon structure produces breakage at that location.

<sup>71</sup> For example, it is very costly to upgrade the transmission capacity of many fiber electronics systems, such as the SONET rings commonly used for high-capacity services and interoffice transport systems, once those systems have been placed into service. Upgrading capacity on those fiber systems also creates the risk of service disruptions on those systems.

Riolo (AT&T) Decl. ¶ 66. A significant component of plug-in costs is the labor associated with installing the plug-ins, and this cost can be very high in wire centers with remote DLC locations or significant traffic congestion that increases technicians' travel time. Plug-in fills also are affected by churn in the same way that copper feeder fills are. When a particular customer location becomes vacant, it is far more efficient for a carrier to leave the plug-in assigned to that location than it is to dispatch a technician to free that plug-in and then have to dispatch a technician again when a new customer moves into the location and orders service.

### **3. Structure Sharing**

As explained in SBC's opening comments, any legitimate UNE cost study must be based on levels of structure sharing that are actually attainable in the real world, rather than on speculation about the sharing levels that would exist if certain immutable, real-world facts somehow could be changed. *See* SBC Comments at 61-62. The ARMIS data and other company accounting records that incumbents regularly provide in UNE cost cases not only provide accurate information about the structure sharing opportunities that those carriers have experienced in recent years—when price cap regulations and facilities-based competition gave incumbents strong incentives to operate efficiently—but also the levels that can be expected to occur in the foreseeable future.

AT&T and a handful of other commenters wrongly argue that forward-looking UNE cost studies must assume much greater sharing-related savings than ILECs have achieved. But ILECs have had no reason to waste their money by ignoring feasible structure sharing opportunities over the past ten years, and there is therefore no reason to assume that the level of real-world structure sharing is anything short of optimal. Indeed, in recent years, right-of-way regulations in many municipalities have supplemented the efficiency incentives provided by price caps and competition by encouraging carriers to coordinate their construction schedules to minimize

repeated excavations. For these reasons, incumbents have made it their policy to share structures with other utilities, such as providers of water, gas, electric and cable television services, whenever they can do so efficiently. Nevertheless, various factors, such as safety considerations and the complexities of coordinating construction crews and capital budget cycles, limit the extent to which structure sharing is feasible in the real world, particularly for buried and underground cables.<sup>72</sup> And the availability of pole access (and UNEs) also limit other entities' incentives to share incumbents' structure investments.<sup>73</sup> Thus, incumbents' current structure sharing levels are the best measure of the sharing levels that any efficient carrier experiences in the real world on a forward-looking basis. Indeed, if anything, that evidence may overstate sharing opportunities, because ILEC placement activities disproportionately occur in developing areas, where other entities are more likely to seek to install their facilities in the same place at the same time as the ILEC.

In several obscure passages, AT&T attributes to the ILECs, and then purports to refute, an argument that sharing percentages should reflect the supposedly lower levels of sharing that incumbents experienced during the pre-1996 era.<sup>74</sup> AT&T's point is difficult to comprehend, for AT&T alone is asking the Commission to base present-day UNE costs on sharing opportunities

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<sup>72</sup> Because trenches cannot be left open indefinitely, trench sharing requires multiple carriers that are willing and ready to install their cables or conduit systems on a particular route segment within days of each other. The readiness and willingness of other utilities to share the costs of structures along a particular route at a particular time is beyond ILECs' control. As a result, incumbents are often left without potential sharing partners.

<sup>73</sup> ILECs typically are able to share pole investments only with electric utilities, because other utilities and carriers pay pole attachment fees. Thus, the appropriate way to account for sharing of poles with these utilities in UNE cost studies is to adjust pole expenses to reflect pole attachment revenues and costs—not to make counterfactual assumptions about structure sharing.

<sup>74</sup> AT&T Comments at 70-72; Riolo (AT&T) Decl. ¶ 81.

that existed—if at all—only in the past. Most of the neighborhoods in any TELRIC model, and thus the sites of the vast majority of lines whose forward-looking costs are at issue, are already developed. Many sharing opportunities disappeared once those neighborhoods became developed, because that is when, by definition, the “other utilities” installed most of their facilities and thus lost their primary incentive to defray the cost of deploying their facilities. This explains why AT&T routinely asks state commissions—sometimes with success—to move the sharing inquiry back in time to the days before development, when sharing opportunities were greater than they are today. *See* SBC Comments at 62. AT&T similarly argues here that regulators should account not just for all sharing-related savings that would be possible if the telecommunications network itself were being built from scratch, but also for “all sharing opportunities that would exist if . . . utility networks were being built anew” as well. AT&T Comments at 71 (emphasis added). As the Commission has observed, however, it is wholly inappropriate to “assume[] away not just the features of an incumbent LEC’s existing network but also attributes of the real world in which incumbents and competitors operate.” *NPRM* ¶ 47.

Even while AT&T dials the clock backward, it insists that the Commission base sharing percentages on factors that AT&T suggests will increase sharing in the future. This utter mismatch is without any internal logic. Indeed, Professor Willig’s declaration abandons even the hypothetical, instantaneous replacement interpretation of TELRIC that CLECs have championed for years, and instead advocates setting UNE rates without regard to the “‘actual’ sharing percentages that are likely to occur in the next few years” in the real world. Willig (AT&T) Decl. ¶ 97. In any event, the “forward-looking” factors AT&T cites would *already* have affected *existing* sharing of incumbents’ structure costs. For example, carriers and utilities have been

living for years with the “new” municipal ordinances that encourage sharing that AT&T cites.<sup>75</sup> And there is no basis for AT&T’s argument that “recent” technological developments—such as the use of fiber rather than copper transmission facilities by cable television providers and improvements in electrical transmission equipment—have expanded sharing opportunities. These technological developments occurred years ago and therefore can hardly be said to be “recent.” Whatever impact these developments may have had on structure sharing have already been felt and are duly represented in incumbents’ recent sharing experiences.

Finally, there is no basis for concluding, as the CLEC TELRIC Coalition does, that ILEC sharing data are “neither accurate nor verifiable.”<sup>76</sup> ILEC evidence of average structure costs from recent projects, as reflected in their accounting records, accurately details the portion of structure costs that the incumbent has actually paid. As a result, requiring incumbents to produce more explicit data about actual percentages of structure costs that are shared would serve no useful purpose. For all of these reasons, the Commission should clarify that ILECs’ current structure sharing experience, as reflected in ILECs’ accounting records, should be used as a basis for ascertaining incumbents’ forward-looking costs, and that state commissions may not “assume[] away . . . attributes of the real world”<sup>77</sup> by approving structure sharing percentages higher than those that exist in reality.

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<sup>75</sup> AT&T Comments at 70-71; Riolo (AT&T) Decl. ¶¶ 96-101, 106.

<sup>76</sup> Comments of CLEC TELRIC Coalition, at 73 (Dec. 16, 2003) (“CLEC TELRIC Coalition Comments”).

<sup>77</sup> *NPRM* ¶ 47.

#### 4. Loop Technology

To ensure that UNE rates adequately compensate the incumbent and send appropriate economic signals, the Commission should require that cost studies assume the use of technologies that are or actually will be in place in the incumbent's network during the UNE planning period.<sup>78</sup> In the context of loop inputs, this means that UNE cost studies should include both newer and older technologies—such as IDLC and UDLC—to the extent that ILECs will actually employ that mix of technology. The sole exception to that rule is where the network includes technology that is obsolete—such as the analog switch. *See supra* Part I.C. The CLECs, however, urge the Commission to assume the deployment of technology within the TELRIC model that an incumbent has no plans to deploy or, worse, technology that does not even exist today. This position contradicts both TELRIC as it is currently formulated and the Commission's proposal to ground TELRIC more firmly in reality.

For example, AT&T argues that loop cost studies should reflect lower costs that would result from using IDLC deployed with the GR-303 interface, which AT&T calls an example of a “proven and widely deployed” technology.<sup>79</sup> AT&T has repeatedly taken the position that it is appropriate to assume that all loops with fiber feeder would use 100% IDLC/GR-303 and that efficient carriers would use *no* UDLC on a forward-looking basis. But IDLC/GR-303 cannot be used to unbundle stand-alone loops. As AT&T itself has previously acknowledged to the Commission, the necessary technological and security solutions that would be required to

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<sup>78</sup> SBC Comments at 58.

<sup>79</sup> AT&T Comments at 26.

unbundle stand-alone loops using IDLC/GR-303 are not currently available.<sup>80</sup> ILECs therefore have not replaced all UDLC with IDLC, as the CLECs contend an efficient carrier would do, nor have the ILECs any plans to do so—nor *could* they do so and continue unbundling loops to CLECs.<sup>81</sup>

It is thus economically irrelevant that loop costs might be lower if, counterfactually, IDLC/GR-303 could somehow replace UDLC and still permit ILECs to meet their unbundling obligations. In any event, AT&T is wrong that IDLC/GR-303 would reduce loop costs, because the only means of providing unbundled stand-alone loops using IDLC/GR-303 today is to employ expensive manual work-arounds. *See* Aron/Rogerson Dec. 2003 Paper § 3.2 at 26-27. It makes no sense to insist on reducing costs on the assumption that IDLC could be used to unbundle stand-alone UNE loops, as the Wireline Competition Bureau did in the *Virginia Arbitration Order*,<sup>82</sup> without reflecting the ancillary cost increases that would result from this approach.

Of course, as explained above, the only truly sensible approach is to base UNE costs on the technology the ILEC *actually* deploys, and, for all of the reasons stated above, ILECs have no plans to deploy 100% IDLC/GR-303 in their networks. The Commission should reaffirm that

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<sup>80</sup> *See, e.g.*, Ex Parte Letter from Joan Marsh, Director, Federal Government Affairs, AT&T, to Marlene Dortch, Secretary, FCC, filed in CC Docket Nos. 01-338, 96-98, and 98-147, at 3 (Dec. 4, 2002) (observing that “[t]here are provisioning, alarm reporting, and testing issues that have not yet been worked out for using GR-303 in a multi-carrier environment,” and that “other operational concerns must be addressed before the deployment of any solution whose underlying architecture and technology is premised on GR-303 DLCs”).

<sup>81</sup> IDLC also is incapable of serving non-switched services, so incumbents—indeed, all carriers—must maintain a healthy amount of UDLC for such services.

<sup>82</sup> *Virginia Arbitration Order* at 17845 ¶¶ 312-14.

current TELRIC rules, and its desire to make TELRIC more economically appropriate, make the ILEC's actual choice of technology the relevant standard for determining UNE costs.



#### **D. Switching Costs**

The CLECs' advocacy on switching costs is another manifestation of the basic tension underlying their advocacy in this proceeding: while, on the one hand, they insist that TELRIC is *not* a black box and that it moors costs to some measure of reality, they simultaneously argue for setting UNE costs as if the real world were no constraint at all. In the case of switching, they insist that the TELRIC model should assume that virtually all switching equipment in the network can be purchased at the lower-priced "new switch" prices to the exclusion of higher-priced growth additions and upgrades, even though—as this Commission and the D.C. Circuit have both held—vendors have marked down the price of new switches *only because* they expect to make up the difference through high margins on heavy sales of add-ons once they have locked a carrier into the use of their proprietary technology. In the TELRIC world the CLECs envision, manufacturers would be frozen in time, forced to continue selling switching equipment at prices far below those needed to ensure their profitability.

That is not this world. The perfectly sized, perfectly up-to-date, and untenably cheap switching network the CLECs envision is the stuff of fantasy. Indulging that fantasy would convey warped price signals to the market, since no carrier could ever design such a network or pay such low prices. To bring switching costs back into line with reality, the Commission should clarify that they must reflect the mix of switching equipment purchases the incumbent will make during the planning period in question.<sup>83</sup> Further, the Commission should reaffirm that principles of cost recovery compel usage-based switching rates for usage-based switching costs.

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<sup>83</sup> In addition, as SBC explained in its comments, the Commission should find that the technology mix (in particular, the mix of switches by vendor type) present in the incumbent's switching network is the appropriate starting point for determining switching costs. *See* SBC Comments at 70. No CLEC contested this issue, and there is no reason to second-guess an

## 1. Mix of Switch Purchases

The Commission should clarify that switching costs must reflect the actual costs incumbents will incur for the switching equipment they deploy in their networks over the planning period. *See* SBC Comments at 71. From this real-world data, drawn from switching contracts and other objective sources, a reasonable inference can be drawn about forward-looking network-wide switching costs.<sup>84</sup>

The CLECs contend that this data would improperly include a substantial amount of the higher-priced “add-on” and “upgrade” switching equipment. *See* AT&T Comments at 74; MCI Comments at 27. They argue that switching costs should instead reflect the costs of serving the network with new switches designed to accommodate all existing demand, with only minor allowances for the need to purchase growth additions. *See* AT&T Comments at 73-74; MCI Comments at 28. This, the CLECs claim, would be a so-called “life-cycle” discount<sup>85</sup> that would more fairly account for the costs the incumbent actually would bear to serve demand. *See id.*

A *true* life cycle discount might generate a fair measure of switching costs if, unlike what the CLECs propose here, it were designed to measure the costs that an incumbent actually bears

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incumbent’s choice of which vendor’s switch best serves the needs of a specific office or makes the most economic sense overall.

<sup>84</sup> There is no merit to AT&T’s claim that ILECs refuse to provide their switching contracts in UNE proceedings. *See* AT&T Comments at 75. Incumbents *do* routinely produce reams of contract and purchasing documentation in UNE proceedings. And while bright-line discovery rules would eliminate much of the controversy in current UNE proceedings, AT&T’s request for “all switching contracts and other pertinent data” from the past five years in every UNE proceeding is burdensome and unsupported by any showing of need or relevance.

<sup>85</sup> The debate over switching prices is often referred to as the “switch discount” issue, because some manufacturers provide—or used to provide—discounts off the list price for new switches. Today, SBC does not obtain a formal “discount” on switch equipment; rather, it negotiates individual switching prices with its manufacturers based on the mix of equipment SBC intends to buy.

to buy a new switch and then provision the add-ons and upgrades required to operate that switch throughout its life. That task would pose extremely difficult measurement challenges. It is clear, however, that a true life cycle cost for switching equipment would be weighted far more heavily to the higher-priced, add-on equipment, because over the life of the switch the initial equipment is continuously replaced, supplemented, and upgraded, so that the majority of investment made during the life of any switch will be at the higher end of the price range. But a life cycle analysis should be unnecessary if one reasonably assumes that, in any given year, switching manufacturers seek to recover the same or a growing profit percentage, and thus base their pricing on the actual mix of equipment the incumbent purchases.

In any event, the CLECs do not even try to craft a realistic “life cycle discount.” Instead, they simply repackage, with minor variations, their long-standing advocacy for the “all new” switching assumption they have proposed in countless state UNE and Commission 271 proceedings. Specifically, AT&T’s proposed life cycle discount assumes that a carrier’s switching assets would consist almost entirely of new switches sized perfectly to serve all demand that exists today plus an additional two years of demand, and only minimal amounts of growth equipment purchased every two years over the life of the switch. *See* AT&T Comments at 73-74. This results in a switching cost that is weighted almost entirely to the lower prices associated with new switching equipment. Indeed, AT&T’s approach results in a price composed of 92 percent new switch purchases and only 8 percent growth. *See* Joint Declaration of Terry L. Murray and Catherine E. Pitts on Behalf of AT&T, at 20, n. 10 (Dec. 16, 2003). MCI likewise proposes a mix of 96 percent new switch purchases and only 4 percent growth. *See* Declaration of August H. Ankum on Behalf of MCI, at 6 (Dec. 16, 2003) (“Ankum (MCI) Decl.”).

The assumption underlying this approach flies in the face of how incumbents—or carriers generally—actually build out their switching networks. In the real world, where demand fluctuates both up and down, and where technology is constantly changing, it is most sensible to grow switches incrementally. That is why the clear preponderance of switch-related investment consists of growth and upgrade purchases. As Verizon explains, even most original “new switch” equipment is almost entirely replaced over time through add-on purchases, so that the overwhelming majority of switching equipment in the network today was bought at add-on prices. *See* Verizon Comments at 50.

The CLECs’ contrary approach implausibly presumes that manufacturers would continue to offer new switching equipment at very low prices even if they know that the incumbent will need very little “growth” equipment in the future. In fact, if incumbents shifted their purchasing patterns from predominantly growth purchases to over 90 percent new switching equipment purchases, as the CLECs suggest, manufacturers would have to increase their prices for new switching equipment correspondingly, for otherwise they would become unprofitable.<sup>86</sup> As the Commission and the D.C. Circuit have recognized, switch vendors are able to offer new switch purchases at relatively low prices precisely because they anticipate recovering their costs through subsequent, more costly growth purchases.<sup>87</sup>

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<sup>86</sup> MCI argues that switch vendors do not link the low purchase price for new switches to their expectation that the carrier will purchase more switching equipment in the future. *See* MCI Comments at 31. That position is inconsistent not just with the considered judgment of this Commission and the D.C. Circuit, *see infra* note 87, but also with the facts. In reality, when switching equipment contracts are negotiated, both the carrier and the vendor must and do have a fairly accurate idea of the amount of new and growth switching equipment that will be purchased under the contract. *See* Palmer Reply Decl. ¶¶ 16-17.

<sup>87</sup> *See AT&T Corp. v. FCC*, 220 F.3d 607, 618 (D.C. Cir. 2000) (recognizing that vendors offer new switching equipment at relatively low prices only “in order to make telephone companies dependent on the vendors’ technology to update the switches”); Memorandum

In short, if a carrier could rebuild its network from scratch with new switches that were somehow designed to eliminate the need for the repeated growth and upgrade add-ons that vendors expect to supply in the real world, that carrier would necessarily end up paying much higher costs for whatever “new” switching equipment it does buy. The extremely low costs that AT&T and others hypothesize would never be available in the real world: neither the incumbent itself nor any efficient new entrant, whether an existing one or one “poised” to enter the “perfectly contestable market,” could find a willing seller of switching equipment at such consistently low prices. Thus, the “life cycle discount” the CLECs propose fails on its own terms as a supposed “pricing constraint” for the incumbent. By contrast, the price of the equipment that incumbents actually place in the network today provides a far better measure of actual switching costs. If CLECs can obtain switching more cheaply, they can and should do so, given the ready availability of switching on the open market. The fact that they often do not simply reaffirms that the hypothetical UNE switching rates the states routinely adopt, which assume high percentages of low new switch pricing, are well below the prices manufacturers actually offer in the real world.

## **2. Upgrade Costs**

For similar reasons, the Commission should find that UNE rates must reflect the costs for the technological upgrades that incumbents make to their existing switches. As SBC has explained in its opening comments, it makes no sense to exclude such costs because, in the real world, switches are designed to be constantly updated, and *no* carrier offering switching over the

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Opinion and Order, *Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York*, 15 FCC Rcd 3953, 4085-86 ¶ 247 (1999); *see also* SBC Comments at 72; Verizon Comments at 51-52; *NPRM* ¶ 77 (“the large initial discount is available *only* when an overall purchase of both new and growth equipment is planned.”); *see generally Virginia Arbitration Order* ¶ 385.

long-term could ever avoid upgrade costs without seriously compromising its ability to provide state-of-the-art service. *See* SBC Comments at 72-73.

AT&T claims that it is unfair to charge today's users for upgrades that will be installed in the future on the theory that they do not now enjoy the benefits of those upgraded switching capabilities. *See* AT&T Comments at 74-75. This argument is specious. As an initial matter, upgrades are constant and many will be made while "today's" users are receiving service. And, in any event, "today's" users enjoy the benefit of the technology upgrades that were installed in the past, which permitted the incumbent to provide them with up-to-the-minute, full-featured switching without having to replace the switch entirely. In other words, at any given point in time, all users benefit from a carrier's global decision to make continuous upgrades over the life of a switch. Replacing the entire switch with an upgraded one would, of course, be a vastly more costly means of accommodating new technology in the real world—though not, of course, in the world the CLECs fantasize. Since upgrades are an integral part of switching costs, it is perfectly appropriate to account for them in switching rates.

### **3. Switching Rate Structure**

Not content simply to reduce incumbents' aggregate recovery of switching costs, some CLECs also seek to spread those costs onto other users to avoid paying full freight for the switching resources they actually use. Specifically, they argue that switching costs should be recovered on a fully flat-rated basis with no usage-sensitive component, contrary to the practice almost everywhere in the country. The CLECs would not advocate this approach, of course, unless they expect to benefit disproportionately from it. And that is indeed what they expect: they target unusually high-volume customers, and they hope that their flat-rated approach to per-line switching costs will generate implicit cross-subsidies for them at the expense of lower-volume users. The Commission should reject that approach, and it should clarify that switching

costs should be recovered through a combination of a usage-sensitive minute-of-use rate and a flat port rate.

The CLECs claim that switching costs are almost exclusively non-traffic-sensitive. *See* AT&T Comments at 75-78; MCI Comments at 29. That is false.<sup>88</sup> While incumbents do, as the CLECs point out, invest up-front in a substantial amount of switching capacity, *see* MCI Comments at 30; AT&T Comments at 76, this does not mean that the costs of that capacity are non-usage-sensitive. To the contrary, the amount of capacity the incumbent purchases at the outset is of course dependent on its best estimate of future usage, and all usage the incumbent then serves contributes to the potential exhaust of the switch's capacity. It is thus entirely sensible, as regulators have concluded for decades, to expect users of the switch to bear some substantial percentage of these total costs in direct proportion to their usage.

The CLECs' contrary approach flies in the face of basic cost-causation principles. A fundamental principle of UNE cost recovery, established by the Commission in the *Local Competition Order*, is that "rates for . . . unbundled elements must recover costs in a manner that reflects the way they are incurred."<sup>89</sup> As the Commission has recognized, if costs are shifted from the cost causer to other users, the prices paid by customers become "distort[ed]," and some

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<sup>88</sup> Even the CLECs stop short of claiming that *no* switching costs are usage sensitive. *See* AT&T Comments at 76. The Wireline Competition Bureau came to the same conclusion in the *Virginia Arbitration Order*, despite erroneously adopting a flat rate for switching costs. *See Virginia Arbitration Order* at 27272 ¶ 473. And, as Verizon has noted, the Commission has repeatedly recognized that significant switching resources are usage-sensitive. *See* Verizon Comments at 53-54.

<sup>89</sup> *See Local Competition Order* at 15874 ¶ 743.

customers are subsidized by others.<sup>90</sup> Here, if these usage-sensitive switching costs were recovered through a flat rate charged to all users, low-volume users would be subsidizing the capacity costs incurred on behalf of high volume users. As noted, this is precisely *why* the CLECs prefer this rate structure, because they overwhelmingly target high volume customers.<sup>91</sup> The ability to serve those high-usage customers at flat-rated charges, which are in any event typically below-cost, would allow the CLECs to set retail prices that encourage even more usage by these CLECs' customers—which would in turn further strain switch capacity, while avoiding any need to cover the attendant costs.

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<sup>90</sup> Memorandum Opinion and Order, *Investigation of Interstate Access Tariff Non-Recurring Charges*, 2 FCC Rcd 3498, 3501-02 ¶¶ 25-32 (1987) (“*Non-Recurring Charges Order*”).

<sup>91</sup> See Verizon Comments at 53, 55.



**E. Non-Recurring Costs (NRCs) and OSS**

**1. Non-Recurring Costs Should Be Based on the Costs Incumbents Actually Incur to Provision CLECs' Requests for UNEs.**

The CLECs argue for limiting the incumbent's recovery of non-recurring costs to the costs an incumbent's network would incur if it included "fully mechanized OSS, with minimal manual processing of service orders," that would allow fully 98% of orders to "flow through" electronically, and that would "eliminate virtually all labor components associated with order processing." AT&T Comments at 109-10. The short answer to this proposal is that no carrier has ever deployed such hyper-efficient systems, and for good reason: they do not exist. The CLECs have never produced evidence to the contrary. Instead, they rely solely on groundless speculation about how non-recurring activities might be done better if hypothetical technology and systems were already available.

But such technology is not available. The CLECs' advocacy on this point is thus inconsistent not just with the reformed version of TELRIC proposed in the *NPRM*, but even with the current version of TELRIC, which already constrains the inquiry to "currently available" technology. 47 C.F.R. § 51.505(b)(1). And it exposes the disingenuousness of AT&T's more general assurance that "TELRIC models, in actual practice, model technologies and practices that have been proven and widely deployed—including by the ILECs themselves." AT&T Comments at 25-26.

The CLECs' position is also deeply self-contradictory. Any carrier would incur massive costs to develop and deploy the now-unavailable systems that would be hypothetically capable of handling every order no matter what its complexity and no matter what the UNE volume. In their cost studies, the CLECs habitually ignore those enormous extra development and investment costs while positing all the putative flow-through savings of the resulting OSS. This

heads-I-win, tails-you-lose approach would disengage UNE rates even further from any coherent notion of real-world costs. Indeed, in the real world, where OSS costs cannot simply be ignored, it could well make little sense to spend millions of dollars on such next-generation systems, whose investment costs would dwarf the comparatively modest expense of manually processing the realistic proportion of CLEC orders that fall out of today's more cost-efficient systems. But, if regulators conclude otherwise, and if they (misguidedly) build into their models the supposed flow-through benefits of these hypothetical systems, consistency would require them to build the costs of those systems into the model as well. And, as discussed below, those costs would need to be borne by the CLECs that cause them, despite the CLECs' ill-conceived efforts to palm them off on the ILECs' retail customers.

The CLECs' position on these points is unsound for a third reason as well: their affinity for technological speculation in the NRC setting is, if anything, even more untenable than it is in the recurring cost setting. The CLECs argue that any technological advance in the field of order-processing systems should immediately reduce NRC levels because it decreases the *value* of the incumbent's existing systems. *See, e.g.,* AT&T Comments at 4. But non-recurring costs generally are not based on the "value" of any underlying technology. Instead, they are based on the largely labor-driven costs of doing business using the network that the incumbent has in place at the time it provisions the relevant orders. The incumbent will bear these out-of-pocket employee costs even if the value of its capital assets is influenced by the impact of new technologies. Indeed, it will bear those costs and somehow have to pay its employees' salaries even if a competitor enters the market that does not bear such costs. That is why the Commission itself has recognized that basic fairness principles entitle incumbents to recover their out-of-pocket non-recurring costs notwithstanding speculation about what costs a carrier

will incur “in a forward-looking environment”—the CLECs’ catchphrase for “in the distant future.” For example, as discussed below, the Commission has acknowledged the incumbents’ right to recover their loop-conditioning costs even if a network deployed today would be designed to avoid the need to condition loops altogether.<sup>92</sup>

There is also no validity to AT&T’s claim that ILECs have special incentives to perform non-recurring activities inefficiently to disadvantage their CLEC competitors. First, as SBC explained in its opening comments (at 82), most wholesale ordering functions have retail analogues, and facilities-based competition and price caps give ILECs every incentive to perform those functions as efficiently as possible. And, even where non-recurring activity has no retail analogue, this Commission and the state commissions have pervasively regulated the efficiency of the ILECs’ wholesale ordering systems, first as a prerequisite to section 271 approval and now through enforcement of the “performance assurance plans” that subject ILECs to self-executing and often draconian penalties for any lapse of efficiency in the performance of non-recurring

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<sup>92</sup> See, e.g. Third Report and Order and Fourth Further Notice of Proposed Rulemaking, *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996*, 15 FCC Rcd 3696, 3784 ¶ 193 (1999) (“*UNE Remand Order*”) (emphasis added); accord FCC S. Ct. Reply Br., 2001 WL 881216 at \*9 n.7 (rejecting the “suggestion that TELRIC authorizes regulators to require incumbents to modify, ‘for free,’ loops to facilitate certain advanced services,” even though the work might not be required in a hypothetical, different network (citations omitted)). The CLECs contend that entitling incumbents to recover their actual non-recurring costs on a going-forward basis would involve the use of a “short-run” methodology. Murray (AT&T) Decl. ¶ 53. That argument makes no more sense in the NRC context than it makes in the recurring cost context. See Section I.C, *supra*. In any event, contrary to AT&T’s related contention, Murray (AT&T) Decl. ¶ 135, SBC’s proposed approach *would* appropriately reflect the impact on non-recurring costs of new technological or systems investment to the extent that it is made within the planning period, as reflected in its engineering plans, and to the extent those plans document the resulting cost impacts of the new systems (rather than mere speculation as to what those impacts might be). Those engineering plans reflect the real-world considerations for deployment, and UNE costs should reflect them.

functions. AT&T's absurd suggestion that regulators should *begin* with a presumption that the incumbent is inefficient, *see* Murray (AT&T) Decl. ¶ 177, is thus wholly without foundation.

Finally, AT&T is simply wrong in arguing that "ILECs lack data on their 'real-world' practices." AT&T Comments at 105; *see also* Murray (AT&T) Decl. ¶¶ 160, 162. First, this argument is baldly inconsistent with the repeated claims of AT&T and other CLECs, in state UNE rate proceedings, that the incumbents' non-recurring cost models are based *too closely* on the actual network.<sup>93</sup> And, while forward-looking, SBC's non-recurring cost model makes extensive use of real world data. For example, SBC systems capture data concerning the frequency with which certain work centers perform non-recurring activities in connection with particular types of orders. And like other incumbents, SBC extensively consults its employees—the people who perform the relevant non-recurring work every day—concerning task times and other relevant details. Such data provide a straightforward means of calculating the non-recurring costs the incumbent will bear during the relevant period.

AT&T's suggestion that basing non-recurring costs on real world data would produce indeterminate battles about "which party's time and motion study is more reliable," AT&T Comments at 105, is similarly without merit. As AT&T is aware, the CLECs rarely bother to produce time-and-motion studies of their own or any other study based on any real-world network. Instead, their non-recurring cost proposals are limited only by the imaginations of the consultants they pay to come up with plausible-sounding theories to support low non-recurring rates. Putting a long-overdue end to that practice would do much to rationalize the process for setting non-recurring rates.

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<sup>93</sup> *See, e.g.*, AT&T Initial Post-Hearing Brief, D.T.E. 01-20, Part A (UNE Rates), at 236 (Mass. Dept. of Telecom. & Energy Mar. 5, 2002).

## **2. Non-Recurring Costs Should be Recovered on a Non-Recurring Basis.**

The CLECs are not content simply to reduce non-recurring rates to unrealistic, below-cost levels. They seek as well to postpone or prevent recovery of such (understated) costs by loading them onto recurring costs, so that the incumbent may recover them, if at all, only over long stretches of time, often enabling the cost-causing CLEC to cancel service before reimbursing the incumbent for the activity. That proposal is baseless. As SBC explained in its opening comments (at 83-84), this Commission has properly adhered for many years to the principle that non-recurring costs should be recovered from the cost-causing carrier in the manner in which they are incurred: up front. AT&T's mischaracterization of such charges as an "entry barrier," *see* AT&T Comments at 103, simply underscores AT&T's misunderstanding of that term.<sup>94</sup>

Requiring CLECs to internalize the non-recurring costs they cause will induce them to cause those costs when, and only when, there are offsetting benefits to consumers that will enable the CLECs to cover those costs through the retail revenues they earn over time. If a CLEC predicts that customers will not value its service enough to enable it to cover those costs, it means that the imposition of such costs is unmatched by commensurate consumer benefits—and is thus a net waste of social resources. Forcing the CLEC to make this judgment does not impose a "barrier to entry": it is simply an efficient mechanism for leaving with the CLEC the task that any competitor must perform, of separating objectively efficient from objectively

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<sup>94</sup> It is also, as an empirical matter, impossible to square with the explosion in UNE-based entry. Even though, in most states, non-recurring costs *are* routinely recovered through non-recurring rates, UNE-P-based lines continue to increase substantially—from 2.8 million to 13 million between December 2000 and June 2003. *Local Competition Report: Status as of June 30, 2003*, Industry Analysis and Technology Division Wireline Competition Bureau, December 2003, at Table 4.

wasteful business plans. What AT&T seeks is not removal of an “entry barrier,” but the conversion of ILECs into long-term creditors for CLECs. But if CLECs need financing to cover their non-recurring costs, they can readily obtain it from the highly competitive capital markets. A judgment by regulators about the terms on which CLECs should be able to borrow money—in the form of deferred payments on non-recurring obligations—is no substitute for the judgments of the free market about which CLEC business plans make economic sense and will thus produce returns in line with the associated costs.

Indeed, the CLECs virtually admit that shifting non-recurring costs into recurring rates makes it more difficult to ensure recovery of those costs: “The *only way* that a new entrant can be sure of recovering the full cost of the non-recurring charges it incurs on behalf of a retail customer is to impose an up-front non-recurring charge . . .” Murray (AT&T) Decl. ¶ 130 (emphasis added). This is so, AT&T argues, “given the frequency of customer churn that one might reasonably expect in a newly competitive market.” *Id.* Though AT&T makes this argument to explain why it should be excused from paying an up-front charge, its own argument shows why it would be unfair and inconsistent with the Act to deny incumbents the right to recover their non-recurring costs up-front through a non-recurring charge. There is no defensible reason why the incumbent should be forced to bear the risk of the CLEC’s entry or customer retention. Indeed, the risks and costs the CLECs are asked to bear are the risks and costs any carrier, including the incumbent, must bear in serving any new customer. While AT&T argues, irrelevantly, that the incumbent bears no non-recurring costs when a customer *remains* with the ILEC, whereas all the CLECs’ customers are “new,” Murray (AT&T) Decl. ¶¶ 130, 131, that does not change the fact that the ILEC bore and will bear non-recurring costs in establishing service for each of its customers—including those customers that may return to it from CLECs

or other carriers. And in the “newly competitive” telecommunications industry, the ILEC loses and regains customers to churn as much as the CLECs do.

In addition to compelling ILECs to serve as bankers of last resort to the CLECs, loading non-recurring costs onto recurring rates would be economically irrational in a second respect as well: It would force efficient CLECs that use fewer non-recurring activities to subsidize the costs caused by CLECs that incur substantial non-recurring costs (by, for example, engaging in more extensive manual ordering), and would cause CLECs that retain customers for longer to pay the higher costs created by CLECs that have inferior customer retention. That is one reason why, when the Commission addressed similar issues fifteen years ago, it entitled ILECs to “recover through an NRC their full one-time costs of providing, terminating or modifying an access service[.]. . . . consistent with our policies encouraging the recovery of costs from cost causers and . . . reduc[ing] the subsidy of short-term users by longer term customers.”<sup>95</sup>

These same cost-causation principles likewise undermine the CLECs’ proposal to limit the category of non-recurring costs by redefining them to exclude any costs that relate to an activity from which any future user (including the incumbent) might conceivably benefit sometime in the future. *See* AT&T Comments at 111-14; Ankum (MCI) Decl. at 56; CLEC TELRIC Coalition Comments at 86. As the Commission has recognized, “LECs should not be forced to underwrite the risk of investing in equipment dedicated to the interconnector’s use, *regardless of whether the equipment is reusable*.”<sup>96</sup> That a later user might *benefit* from a non-recurring activity—what AT&T calls the “reusability test,” AT&T Comments at 112—has no

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<sup>95</sup> *Non-Recurring Charges Order* at 3501-02 ¶ 33.

<sup>96</sup> *Id.*; *see also Local Competition Order* at 15874 ¶ 743 (costs should be recovered “the way they are incurred”); *Non-Recurring Charges Order* at 3502 ¶ 35 (determining that loading non-recurring costs into recurring rates would be inconsistent with cost-causation policies).

bearing on the manner in which the incumbent *incurs* the up-front, one-time cost involved in filling a particular CLEC's order. And since the incumbent bears this cost up-front, on the CLEC's behalf, the CLEC, not the incumbent, should bear the cost. In the Commission's own words, the determining factor for how costs should be recovered is "the way they are incurred."<sup>97</sup> Again, this outcome is perfectly equitable: an ILEC and a CLEC alike will each bear the risk that, when it incurs costs to provide service to a new retail customer, that customer may later move to a different service provider, which may benefit from the previously incurred costs without having to pay them.

There also is no basis for the CLECs' contention that recovering costs of one-time activities that might benefit another user through non-recurring charges could result in double-recovery. *See* AT&T Comments at 112-13; CLEC TELRIC Coalition Comments at 86. First, SBC specifically accounts for the fact that in some cases prior work may eliminate the need to perform certain activities to fill a CLEC's order. For example, SBC applies a "DOP" (Dedicated Outside Plant) factor that reduces the non-recurring costs associated with placing cross-connects by the percentage of times the cross-connect is likely to be already in place at the feeder distribution interface ("FDI"). Second, SBC specifically adjusts its *recurring* costs by ensuring that no non-recurring costs are included in its maintenance factor, so that they cannot be double-recovered through both recurring and non-recurring charges.

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<sup>97</sup> *Local Competition Order* at 15874 ¶ 743.



**3. The CLECs' Arguments with Respect to Specific Non-Recurring Costs Are Readily Dismissed.**

**a) Loop Conditioning**

The CLECs insist that the Commission should preclude incumbents from recovering anything for the conditioning costs they incur to provision CLEC requests for DSL-capable loops incumbents on the theory that they bear such costs only because their networks are inefficient. *See, e.g.*, AT&T Comments at 116-17; Covad Comments at 18-19; Ankum (MCI) Decl. at 65. That argument, like many of the CLECs' other arguments, requires assuming away the existing network and pretending it could be continuously rebuilt from scratch with the benefit of perfect hindsight about technological developments and consumer demand. The argument is thus invalid for all the reasons discussed in Part I above. Indeed, as discussed, it is even more nonsensical to apply this "blank slate" version of TELRIC to non-recurring costs than to recurring costs. As the Commission has rightly observed, an ILEC unavoidably "incur[s] costs" in conditioning loops pursuant to a CLEC order, and it "should be able to charge" the requesting CLEC for those costs even if "networks built today normally should not require [such] devices on [such] loops."<sup>98</sup>

AT&T also suggests that allowing incumbents to recover loop conditioning costs would be "bad policy" on the theory that incumbents would have an "incentive to perpetuate this inefficient practice." AT&T Comments at 117. But simply entitling an ILEC to recover its out-of-pocket costs is hardly an incentive to do anything, much less a "powerful" one. And in any event, section 252(d) of the Act provides incumbents with the right to recover their costs—a

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<sup>98</sup> *UNE Remand Order* at 3784 ¶ 193. Load coils, repeaters, and bridged tap remain essential today for the provision of voice service on existing loops with over 12,000 feet of copper.

right the Commission cannot simply disregard in favor a “policy” of encouraging allegedly more efficient design through undercompensation. Incumbents already *have* all the incentive they need to abandon any “inefficient practices,” given the competitive pressures today to design networks as efficiently as possible; indeed, the CLECs themselves note that the incumbents’ engineering guidelines call for new loop design that would *not* require such conditioning. *See, e.g.* AT&T Comments at 117. But even competitive pressures cannot somehow convert existing loops into loops that do not have to be conditioned, and no “incentives” will permit incumbents to avoid conditioning charges if CLECs seek to provide DSL on such loops.<sup>99</sup>

**b) Disconnect Costs**

The CLECs argue that incumbents should be precluded from recovering their disconnect costs up-front. *See* AT&T Comments at 114-15; Ankum (MCI) Decl. at 61-62; CLEC TELRIC Coalition Comments at 86. But charging disconnect costs at the time of service connection is standard practice in the retail industry, and there is no reason to treat wholesale customers differently. The justification for this practice is not, as AT&T posits, incumbents’ historic monopoly position. *See* AT&T Comments at 115. Rather, disconnect costs are routinely

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<sup>99</sup> AT&T also suggests that loop conditioning costs, if recoverable at all, should be recovered on a recurring basis, because incumbents routinely condition their networks to remove load coils and bridged taps. AT&T Comments at 116-17; *see also* Ankum at 66. That is wrong: incumbents typically would not condition a loop for data service unless a customer requested data service on that loop, because the conditioning would degrade the line for voice service without producing any countervailing benefit. For the same reason, AT&T is wrong that a conditioned line can “be used long after the CLECs’ request for conditioning” so that the conditioning activity should be paid for through recurring rates. AT&T Comments at 116-117. The conditioned line may be useful for any future users that want to provision *data* on that line, but *not* voice.

recovered up front because this ensures that the carrier is paid even if customers discontinue service without paying their final bills.<sup>100</sup>

Collecting disconnect costs up-front is also consistent with cost-causation principles. AT&T argues that this practice forces CLECs to pay for services “that they had not ordered” and that the incumbent may not ever incur. AT&T Comments at 115. But this is specious: *every* service order is, in effect, an order for disconnection to occur at *some* point in the future. Since the incumbent necessarily *will* have to disconnect the CLEC’s service in the event of customer churn or at *some* future date (since no customer is eternal), there is no plausible argument that the *timing* of the charge might somehow result in the CLEC paying for an activity unrelated to its order.

#### **4. CLECs Should be Required to Pay ILECs’ Actual Costs of Providing Access to OSS**

Among the most absurd of AT&T’s claims in this proceeding is its contention that “CLECs should not be required to bear *any* of the ILEC’s costs of modifying and developing its OSS to make the OSS accessible to CLECs.” AT&T Comments at 107 (emphasis in original). No other CLEC subscribes to this effort to get something for nothing, which is perhaps the most revealing of AT&T’s efforts to transform a cost-based recovery mechanism for UNEs into a subsidy program for CLECs.

The law on this point is clear; indeed, no “reformation” of TELRIC is even required. Access to OSS is a UNE. The Commission long ago concluded from its reading of the Act that

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<sup>100</sup> AT&T contends that the risk of non-payment does not exist in the UNE context because of the “ongoing relationship” between the incumbent and its wholesale customers. Murray (AT&T) Decl. ¶ 268. But the growing rate of wholesale uncollectibles that incumbents face tells another story, and the Commission should reject AT&T’s invitation to don blinders with respect to this problem.

such access “fall[s] squarely within the definition of ‘network element.’” *Local Competition Order* at 15763 ¶ 516. The Supreme Court affirmed, agreeing with the Eighth Circuit that OSS falls “squarely within” the statutory definition.<sup>101</sup> And the 1996 Act does not effect so blatant a taking of incumbents’ property as to order them to provide such UNEs to CLECs for free. It provides instead that ILECs are entitled to charge rates for UNEs that are “based on the cost . . . of providing [them].” 47 U.S.C. § 252(d)(1)(A)(i). This scheme, as the Commission has held from the outset, “requires a requesting carrier to pay the costs of unbundling.” *Local Competition Order* at 15659 ¶ 214. Indeed, it has so recognized in the specific case of line-sharing OSS.<sup>102</sup>

These clear statutory and constitutional principles are a complete answer to AT&T’s new gambit. But the Commission nonetheless should reaffirm those principles and make clear that proposals that would deprive incumbents of compensation for their OSS costs are inconsistent with the Act and any version of the TELRIC rules.

**a) The Commission Should Affirm that CLECs that Use the Incumbent’s OSS Must Compensate Incumbents for OSS Development and Maintenance Costs.**

Although AT&T insists CLECs should not have to pay for OSS, in its comments and supporting declarations, AT&T never argues that CLECs do not benefit from their access to the incumbents’ OSS. Indeed, OSS would not even be subject to unbundling in the first place

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<sup>101</sup> See *AT&T Corp. v. Iowa Utils. Bd.*, 525 U.S. 366, 387 (1999).

<sup>102</sup> Sixth Report and Order in CC Docket Nos. 96-262 and 94-1, Report and Order in CC Docket No. 99-249, Eleventh Report and Order in CC Docket No. 96-45, *In the Matter of Access Charge Reform; Price Cap Performance Review for Local Exchange Carriers; Low-Volume Long Distance Users; Federal-State Joint Board on Universal Service*, 15 FCC Rcd 12962, 13022 ¶ 144 (2000), *rev’d in part on other grounds sub nom.*, *Texas Office of Pub. Util. Counsel v. FCC*, 265 F.3d 313 (5th Cir. 2001) (determining that ILECs may recover their line sharing OSS costs incurred to provide line sharing as a UNE).

without a finding that CLECs' ability to compete would be substantially impaired without it.<sup>103</sup>

But AT&T asserts that CLECs should not have to pay for these benefits on the theory that the provision of them is caused not by their demands but by "the transition to a competitive environment," Murray (AT&T) Decl. ¶ 225, or "the legal mandate that ILECs provide nondiscriminatory access to their OSS as part of the transition to a competitive market," AT&T Comments at 108. This is pure sophistry. Access to OSS is no more a "legal mandate" or part of a transition to a competitive environment than any other UNE. Yet even AT&T does not dispute that CLECs should pay for the costs that ILECs incur in fulfilling their "legal mandate" to provide other UNEs, such as loops and switching and transport, on a CLEC's request.<sup>104</sup> As the Wireline Competition Bureau reasoned in rejecting AT&T's line of argument in the *Virginia Arbitration Order*: "Incumbent LECs recover the costs of every other UNE that the Commission has identified through a distinct charge for that UNE, and there is no Commission precedent that supports AT&T/WorldCom's proposal to deny Verizon that same opportunity with respect to this particular UNE." *Virginia Arbitration Order* at 17933-34 ¶ 538.

There is no merit to AT&T's suggestion that OSS costs are somehow different because CLECs have to incur costs to develop their own gateways, in addition to paying for access to the incumbent's OSS. See AT&T Comments at 108. This argument, too, could be extended equally

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<sup>103</sup> *UNE Remand Order* at 3884 ¶ 424 ("We find that requesting carriers are impaired without access to the incumbent LEC's OSS as an unbundled network element. The record demonstrates that, in general, lack of access to OSS as an unbundled network element materially diminishes a requesting carrier's ability to provide the services it seeks to offer."); *id.* at 3887 ¶ 433 ("We conclude that lack of access to the incumbent LEC's OSS impairs the ability of requesting carriers to provide the services they seek to offer. The incumbents' OSS provides access to key information that is unavailable outside the incumbents' networks and is critical to the ability of other carriers to provide local exchange and exchange access service.").

<sup>104</sup> See 47 U.S.C. § 251(c)(3) ("duty to provide" access to UNEs "to any requesting telecommunications carrier").

to *any* UNE: the CLEC always bears its internal “gateway” or systems costs plus the costs attributable to the particular UNE it leases from the incumbent. Whether CLECs have to incur business costs related to leasing a particular UNE is entirely irrelevant to whether the ILEC is legally entitled to recover *its* costs for providing that UNE. The Act provides for such recovery, and does not suggest that recovery may be excused in light of other costs.<sup>105</sup>

AT&T next seeks to justify avoiding payment for OSS costs attributable to CLEC requests on the basis that failing to provide such CLECs with this subsidy “creates a barrier to entry” for them. Murray (AT&T) Decl. ¶ 228. That position is unsound in several respects. First, it is yet another manifestation of AT&T’s more general mischaracterization of the costs of doing business (in line with ordinary cost-causation principles) as “entry barriers.” *See supra* Part II.E.2. Second, the cost recovery scheme under the Act does not permit regulators to ignore ILEC costs in order to eliminate any financial burdens to CLECs. The Act, and UNE pricing, ensure forward-looking prices for UNEs that reflect the pressures of competition; CLECs are thus ensured *access* to UNEs (including OSS) and are ensured fair and reasonable prices — not a free ride. Finally, the notion that OSS costs could impede CLEC entry is curious simply as an empirical matter, are typically minimal.

AT&T also returns to its persistent effort to keep TELRIC in the realm of the purely hypothetical, arguing that, if OSS costs are recoverable at all, the CLECs should be required to pay only for the hypothetical costs of a multi-user OSS system “designed from the ground up.” Murray (AT&T) Decl. ¶ 221. AT&T argues that the costs attributable to the design of such a system would be far lower — and hence more efficient — than the costs the ILECs have actually

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<sup>105</sup> *Local Competition Order* at 15659-60 ¶ 314; *see also* 47 U.S.C. § 252(d)(1).

incurred to adapt their single-user OSS systems to multi-carrier use. *Id.* But in fact, the expenditures the incumbents actually have made to develop their wholesale OSS *do* reflect the best measure of efficient OSS development costs. The purely hypothetical costs that CLECs or regulators may surmise an imaginary carrier might bear to produce the same OSS from scratch today can hardly be said to be more relevant than the actual costs the incumbent has in fact borne to provide real-world OSS. *See* Aron/Rogerson Dec. 2003 Paper § 1, at 4-5 (noting importance of looking at objective evidence of the real-world network in light of regulators' tendency to understate costs). The same concerns that support adjusting TELRIC so that it more closely reflects the costs the incumbent will actually incur, *NPRM* ¶ 54, likewise dictate that OSS UNE rates recover the incumbent's actual OSS expenditures.

Finally, AT&T offers a fall-back argument, seconded by MCI, that OSS development costs should be borne equally by all end-user customers, the incumbent's and the CLECs'. *See* AT&T Comments at 109; Ankum (MCI) Decl. at 49-52. AT&T hypothesizes that the "creation of a gateway is a necessary condition for the move to a multi-provider competitive local exchange market" and that *all* customers will benefit from the resulting competition; therefore, AT&T contends, it is fair to shift the costs of OSS development to customers across the board. Murray (AT&T) Decl. ¶ 232; *see also* Ankum (MCI) Decl. at 52. This is essentially a reprise of its argument that access to OSS is part of a "legal mandate" designed to ensure a "transition to a competitive market." AT&T's argument thus proves far too much, for all customers benefit from any competition produced by all UNEs — not just OSS. AT&T's arguments also repeatedly ignore the touchstone principle that, in all cases, the direct cost causer should bear the associated costs. And in the case of OSS, like all other UNEs, the CLEC is clearly the cost-causer.

While AT&T points to the analogy of competitively neutral number portability cost-recovery mechanisms to support its contention that OSS costs should likewise be spread over all end users notwithstanding that the costs may be immediately caused by the competitor, there is no basis for applying the number portability approach to UNE costs. First, as the Wireline Competition Bureau has recognized, “[T]he fact that Congress did not establish specific cost recovery requirements for OSS as it did for LNP is a key distinction that makes the Commission’s LNP precedent inapplicable.” *Virginia Arbitration Order* at 17935-36 ¶ 543. Specifically, Congress ordered an end-user cost recovery approach for number portability; but it ordered CLECs to bear the costs of the UNEs they use, in keeping with traditional cost causation principles. Second, there are sound policy reasons to spread the costs of LNP across all customers, while requiring CLECs to pay for OSS development costs: LNP benefits all carriers, since incumbents are just as likely to win a customer from a CLEC with LNP as the other way around. Section 251 unbundling obligations, in contrast, are strictly a one-way street.<sup>106</sup>

**b) The Commission Should Permit Any Identifiable OSS Costs to Be Recovered Through Special OSS Recurring Charges.**

AT&T and MCI contend that, even if the Commission permits incumbents to impose OSS costs on CLECs, those costs *must* be collected through annual cost factors. *See* Murray (AT&T) Decl. ¶ 209; Ankum (MCI) Decl. at 50-51. But as explained above, OSS is a separate network element, and the incumbent thus should be free to recover the resulting UNE costs

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<sup>106</sup> The OSS cost recovery mechanism adopted by the California Public Utilities Commission to which AT&T points was simply a settlement agreement and thus did not even reflect a state PUC determination concerning OSS recovery. Indeed, the California commission explicitly stated that “no provision of the Settlement Agreement is precedential for purposes of any future or concurrent proceeding.” Opinion, *Order Instituting Rulemaking on the Commission’s Own Motion into Competition for Local Exchange Service*, D.00-09-037, at 18 ¶ 5 (Cal. Pub. Utils. Comm’n Sept. 7, 2000).



through specific UNE rates. As the Wireline Competition Bureau recognized, “Verizon is correct that access to OSS is a separate UNE and therefore may have a price that is charged to competitive LECs for each customer they serve . . . .” *Virginia Arbitration Order* at 17933 ¶ 537. The Bureau thus “reject[ed] AT&T/WorldCom’s argument that these costs should be recovered solely through [annual cost factors], or solely through an end-user surcharge.” *Id.* at 17934 ¶ 538. While AT&T alleges that its approach is “more practical” given incumbents’ accounting practices and the difficulty of determining whether a particular OSS upgrade supports retail or wholesale functions, *see* Murray (AT&T) Decl. ¶¶ 212-13, this begs the question. Where it *is* possible for incumbents to segregate their UNE-related OSS costs, they should be permitted to recover them as specific OSS UNE rates from the ordering CLECs.

## **F. Collocation Power Charges**

Many ILECs currently bill CLECs for collocation DC power on a per-amp, ordered basis. This method of DC power provisioning and billing is reasonable and logical, because it (1) is based on the amount of DC power requested by CLECs, who are, after all, most knowledgeable about their power needs; (2) reflects the fact that CLECs are fully capable of using all the DC power they order; and (3) reflects the fact that ILECs make available the entire amount of DC power that CLECs request, not just the amount actually used at a given time. Billing CLECs based on the amount of power they order best compensates the ILEC for costs it unavoidably incurs to provide CLECs with power they request, and it is fully consistent with TELRIC principles.

A few CLECs argue that ILECs should instead bill CLECs on a measured, actual-use basis, rather than on the basis of the amount of DC power ordered by the CLECs. However, this scheme would shift the costs for providing collocation DC power from the CLECs—i.e., the cost causers—to the ILECs. Billing CLECs on a measured, actual-use basis would remove any incentive for CLECs to accurately project CLEC DC power needs. CLECs would gain the ability to order vast quantities of power without ever having to pay for it.

These same CLECs point to Illinois as an example in which so-called “metering” devices are already in place to measure CLECs’ power use for billing purposes.<sup>107</sup> But SBC’s experience with metering in Illinois only demonstrates the many problems associated with metering, and why the Commission should be extremely reluctant to endorse it. SBC has found that the metering systems in its central offices in Illinois are incapable of accurately measuring CLEC

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<sup>107</sup> See Declaration of John C. Klick on Behalf of AT&T ¶ 137 (Dec. 16, 2003); Covad Comments at 21.

power use. This inability to accurately measure the collocation DC power is not a characteristic of the equipment being used, but instead is an unavoidable result of the DC power leakage from the CLEC equipment to the grounding structure in central offices. As a result, SBC is significantly underrecovering power charges from each CLEC. Furthermore, even if these technical obstacles could be overcome, SBC has found that its central offices are not designed to support the measurement of DC power and that, as a result, the costs of installing and operating power metering devices in each of its Illinois central offices are prohibitively high. It is no wonder, therefore, that Covad recently stated in a New York collocation case involving DC power issues that metering “would increase costs to Covad, as well as similarly situated CLECs.”<sup>108</sup>

For these reasons, the Commission should not require ILECs to bill for collocation DC power on a measured, actual-use basis. Instead, the Commission should declare that ILECs are allowed to bill CLECs for the amount of DC power that the CLECs order.

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<sup>108</sup> Reply Testimony of Michael Clancy on Behalf of Covad Communications, *Proceeding on Motion of the Commission as to the Rates, Charges, Rules and Regulations in the Provisioning of Direct Current Power by Verizon New York Inc. for Use in Connection with Collocation Spaces*, Case 03-C-0980, at 1 (filed with N.Y.P.S.C. Nov. 24, 2003).

### **III. The Commission's Triennial Review Unbundling Determinations Provide No Basis for Changing UNE Pricing Principles.**

The Commission's decision to eliminate ILECs' obligations to provide unbundled access to facilities and to certain types of fiber loops should not change the pricing principles that apply to loops (and other facilities) that remain subject to the unbundling requirement. It is undisputed that CLECs should not have to pay for facilities they are not entitled to purchase, or for the share of joint and common costs associated with those facilities. But in cost studies today, CLECs are not charged through narrowband UNE loop rates for the costs of broadband facilities that they do not purchase or related expenses: CLECs pay only for the basic loop capacity they receive and for the share of joint and common costs related to those facilities.

Current cost studies already exclude broadband facilities and related expenses from non-broadband loop costs. Narrowband UNE loop costs thus do not include the costs of the additional equipment (such as enhanced DSL line cards and enhanced DSL channel banks) necessary to provide broadband services over hybrid loops. And since no broadband investment is reflected in the loop studies, the share of joint or common costs that would be allocated to such investment (and to the related direct expenses) are excluded from the loop rates as well. Therefore, AT&T's suggestion that expenses currently recovered in loop rates must be reduced to reflect the fact that certain facilities will no longer be unbundled is unfounded and disingenuous; not surprisingly, AT&T gives no examples of the expenses it suggests must be removed, nor any explanation of the means by which such expenses would otherwise be included. *See* AT&T Comments at 54. For the same reason, there is no merit to AT&T's suggestion that ILECs will double-recover their costs if hybrid loop rates are not reduced to account for broadband costs *See* AT&T Comments at 53-55.

Nor is there any valid reason to allocate away any of the costs of hybrid copper-fiber loops to broadband services. The costs the incumbent bears to provide the voice capabilities of a hybrid fiber-copper loop—which, as just noted, are the only costs included in the loop rates in the first place—will not change simply because CLECs no longer have access to the packetized capabilities of such hybrid loops. The CLECs obtain today, and will continue obtaining, the full basic capacity of a two-wire (or other capacity) loop, and they should continue to pay the full costs of providing the facilities used in provisioning such a loop. Notwithstanding its protests that the incumbents have other incentives when deploying hybrid copper-fiber loops, AT&T itself admits that this “architecture may minimize the overall costs of deploying voice and data.” AT&T Comments at 52. It accordingly is in the CLECs’ *interest* that basic loop costs should include the reduced costs associated with such architecture.

AT&T also argues that taking UNEs off the table for unbundling purposes should lead to a reallocation of common costs to those UNEs and away from the voice-grade UNEs that remain subject to unbundling, for otherwise “CLECs would be required to subsidize broadband capabilities to which they are denied access.” AT&T Comments at 55. This makes no sense. There should be no dispute that common costs, such as the costs of structure, must be properly allocated among the facilities that contribute to such costs; that *already* occurs in UNE cost studies. Such allocation decisions do not turn on which UNEs CLECs are legally entitled to obtain, just as they do not turn on which UNEs CLECs ultimately *choose* to obtain within the universe of UNEs available to them. In neither context does a CLEC “subsidize” the facilities it does *not* lease if it pays only the portion of common costs that has been properly allocated to the facilities it *does* lease. To reallocate a greater share of common costs to *unleased* facilities

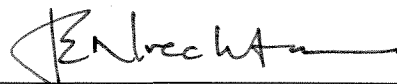
would flout principles of competitive neutrality by artificially subsidizing the CLEC's UNE strategy.

Finally, until fiber to the premises becomes more prevalent, any effort to analyze the costs of access to fiber loops or the costs of the copper that remains behind would be pure conjecture. In the time it takes incumbents to roll out that architecture to any significant degree, the entire communications landscape may have changed. It makes far more sense to have at least some concrete examples of the problem before engaging in the type of hand-wringing that MCI advocates. *See* MCI Comments at 13-15.

## CONCLUSION

The Commission should modify its TELRIC methodology in accordance with the foregoing principles.

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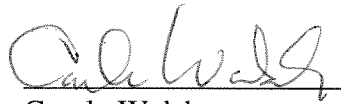
January 30, 2004

CERTIFICATE OF SERVICE

I, Carole Walsh, do hereby certify that true and accurate copies of the foregoing, Reply Comments of SBC Communications Inc., were served by United States Postal Service, first-class, postage pre-paid mail this 30th day of January, 2004, to:

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